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c) a nucleotide sequence that is antisense to the full-length sequence set forth in SEQ ID NO. 1.

- 2. (Amended) A chimeric nucleic acid sequence comprising a promoter capable of driving expression of a nucleic acid sequence in a plant cell operably linked to a nucleotide sequence of claim 1.
- 3. (Amended) The chimeric nucleic acid sequence of claim 2, wherein the nucleotide sequence encodes a poly ADP-ribose polymerase having the amino acid sequence set forth in SEQ ID NO. 2.
- 4. (Amended) The chimeric nucleic acid sequence of claim 3, wherein said nucleotide sequence is the nucleotide sequence set forth in SEQ ID NO. 1.
- 5. (Amended) A vector comprising the chimeric nucleic acid sequence of claim 4.
- 6. (Amended) A plant cell transformed with the chimeric nucleic acid sequence of claim 4.
- 7. (Amended) A transformed plant comprising the chimeric nucleic acid sequence of claim 4.
- 8. (Amended) The chimeric nucleic acid sequence of claim 2, wherein the nucleotide sequence is antisense to the full-length sequence set forth in SEQ ID NO.1.
- 9. (Amended) A vector comprising the chimeric nucleic acid sequence of claim 8.

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11. (Amended) A transformed plant comprising the chimeric nucleic acid sequence of claim 8.

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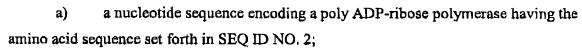
- 12. (Amended) A transformed plant having incorporated into its genome a DNA molecule, said molecule comprising a promoter capable of driving expression of a nucleic acid sequence in a plant cell operably linked to a nucleotide sequence selected from the group consisting of:
- a) a nucleotide sequence encoding a poly ADP-ribose polymerase having the amino acid sequence set forth in SEQ ID NO. 2;
  - b) the nucleotide sequence set forth in SEQ ID NO. 1; and
- c) a nucleotide sequence that is antisense to the full-length sequence set forth in SEQ ID NO. 1.

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15. (Amended) The transformed plant of claim 12, wherein the nucleotide sequence is antisense to the full-length sequence set forth in SEQ ID NO. 1.

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- 18. (Amended) The transformed plant of claim 12, wherein said plant is a monocot.
- 21. (Amended) A method for modulating the metabolic state of a plant cell, said method comprising transforming said plant with a DNA construct, said construct comprising a promoter that drives expression in a plant cell operably linked with a nucleotide sequence selected from the group consisting of:



- b) the nucleotide sequence set forth in SEQ ID NO. 1; and
- c) a nucleotide sequence that is antisense to the full-length sequence set forth in SEQ ID NO. 1.

Please enter the following new claims:

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--24. (New) An isolated DNA molecule comprising a nucleotide sequence having at least 90% sequence identity to SEQ ID NO. 1, wherein said nucleotide sequence encodes a polypeptide having poly ADP-ribose polymerase activity, said polypeptide comprising at least two functional zinc fingers.

- 25. (New) The isolated DNA molecule of claim 24, wherein said nucleotide sequence comprises the sequence set forth in SEQ ID NO. 5.
- 26. (New) A chimeric nucleic acid sequence comprising a promoter capable of driving expression of a nucleic acid sequence in a plant cell operably linked to a nucleotide sequence of claim 24.
  - 27. (New) A vector comprising the chimeric nucleic acid sequence of claim 26.
- 28. (New) A plant cell transformed with the chimeric nucleic acid sequence of claim 26.
- 29. (New) A transformed plant comprising the chimeric nucleic acid sequence of claim 26.
  - 30. (New) The transformed plant of claim 29, wherein said plant is a dicot.
  - 31. (New) The transformed plant of claim 29, wherein said plant is a monocot.
  - 32. (New) The transformed plant of claim 31, wherein said monocot is maize.
- 33. (New) A method for modulating the metabolic state of a plant cell, said method comprising transforming said plant with a DNA construct, said construct comprising a promoter that drives expression in a plant cell operably linked to a nucleotide sequence of claim 24.--

